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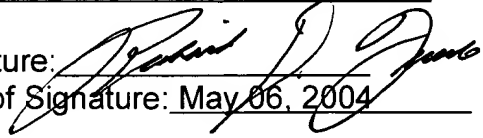
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On: May 6, 2004
By: Richard D. Fuerle

Signature: 
Date of Signature: May 06, 2004

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Applicant: Qi Wang
Serial No.: 09/761,625
Filed: January 17, 2001
For: STABILIZATION OF POLYMERS AFTER EXPOSURE TO OXIDATION

Examiner: Egwin, Kelechi Chidi
Group Art Unit: 1713

The Commissioner of Patents
and Trademarks
Washington, D.C. 20231

REPLY BRIEF OF APPELLANT

Sir:

This is a Brief in reply to the Examiner's Answer, dated April 23, 2004.

Appellant has, in their Brief, already commented on most of the arguments made by the Examiner in his Answer. However, Appellant wishes to also make the following additional comments:

On page 2 of his Answer, the Examiner states, "The summary of invention contained in the brief is deficient because the invention is not a polymer ..." However,

Appellant's description of his invention follows closely the wording in his broadest claim, Claim 25.

On pages 2 and 3 of his Answer, the Examiner objects to Appellant's grouping of claims, citing 37 CFR 1.192(c)(7)(1997). Appellant believes he did comply with this section as the explanation for the grouping of claims is required to be given in the argument and, on pages 8, 9, 10, and 11 of his Brief, Appellant explains why the claims do not stand or fall together.

The Examiner drew two chemical formulas, which he contends (1) are within the scope of Appellant's claims and (2) could not be made by a person of ordinary skill in the art without undue experimentation.

As to the first contention, the Examiner states that the first formula, on page 6 of the Examiner's Answer, is within the scope of Appellant's Claim 25 and that his second formula, on page 8 of his Answer, is within the scope of Appellant's Claim 44.

Appellant does not agree. Each of the Examiner's formulas includes at least two aromatic rings having 5 carbon atoms in them and at least one aromatic ring having 10 carbon atoms in it. But none of Appellant's structures permit 5 membered or 10 membered aromatic rings. Appellant uses the word "aryl," in his definitions, which is defined in The Condensed Chemical Dictionary, Tenth Edition, as meaning:

"A compound whose molecules have the ring structure characteristic of benzene, naphthalene, phenanthrene, anthracene, etc., i.e., either the six-carbon ring of benzene or the condensed six-carbon rings of the other aromatic derivatives."

Thus, neither of the Examiner's formulas falls within the scope of any of Appellant's claims because Appellant's claims do not include 5 membered or 10 membered

aromatic rings.

As to the Examiner's comments on the stability of Appellant's fourth structure in Claim 25 having a triple bond, Appellant notes that he provided 2 working examples (Examples 9 and 10) of stabilizers having triple bonds, though neither is the particular stabilizer cited by the Examiner. The Examiner has cited no art that suggests that the particular stabilizer he cites would not be stable.

As to the Examiner's second contention, that the chemical formulas he drew could not be made by a person skilled in the art without undue experimentation, let us assume, *arguendo*, that the two formulas he drew do fall within the scope of Appellant's claims. The Examiner contends that a person "of ordinary skill in the art" is not a person who has a Ph.D. (in Organic Chemistry), but a person who does not have a Ph.D. See page 7 of his Answer where he says, "However the first paragraph of 35 U.S.C. §112 requires enablement for **the person of ordinary skill in the art**, not just those with doctorate degrees ... " (Emphasis in original.) Appellant's do not agree that 35 U.S.C. §112 should be interpreted as permitting the Examiner to draw formulas for a complicated organic compounds, then contend that a person who does not have a Ph.D. should be able to synthesize them without undue experimentation.

The Examiner does not even specify what level of skill the "ordinary person" must have in order for Appellant to comply with 35 U.S.C. §112. Does he have to be a high school graduate? A person who took a chemistry course in high school? A person with a B.S. in chemistry? Appellant contends that a person skilled in the art of synthesizing complicated organic molecules should have a Ph.D. in Organic Chemistry. It is not reasonable to interpret 35 U.S.C. §112 as requiring Appellant's specification to

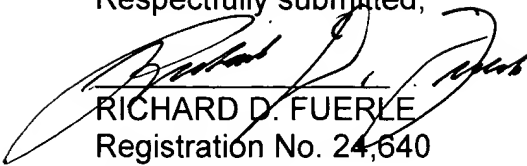
enable a person who does not have a Ph.D. in Organic Chemistry (or an equivalent thereof) to be able to synthesize these molecules.

The term “ordinary skill” in this context is meant to exclude the exceptional, Nobel Prize winning chemist, so that an applicant cannot say that his disclosure is sufficient if, say, Linus Pauling could perform the syntheses. But when there are thousands of people working in academia and industry who have Ph.D.’s in Organic Chemistry, an applicant should be able to meet the requirements of 35 U.S.C. §112 if his specification enables them to synthesize the organic compounds he uses in his invention.

The Examiner has not contended that a person with a Ph.D. in Organic Chemistry would require undue experimentation to synthesize the molecules he drew, only that a person who did not have a Ph.D. in Organic Chemistry would require undue experimentation to do it. Thus, if the “person of ordinary skill in the art” is someone with a Ph.D. in Organic Chemistry, the Examiner does not dispute the sworn assertion of the inventor, Dr. Wang, that such a person could synthesize the compounds without undue experimentation and therefore that assertion should be accepted by the Board as there is nothing on the record that contradicts it.

For these reasons and the reasons given in Appellants’ Brief, it is submitted that Appellant’s specification meets the requirements of 35 U.S.C. §112, first paragraph. The Board is therefore requested to reverse the Examiner and allow Claims 25 to 27, 31 to 34, 36, 38, 39, 42, and 44 to 46.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Richard D. Fuerle", is written over a horizontal line.

RICHARD D. FUERLE
Registration No. 24,640
For Appellant

OCCIDENTAL CHEMICAL CORPORATION
5005 LBJ Freeway
Dallas, Texas 75244-6119
(716)-774-0091
CASE 6956cont
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